

Product datasheet for **RG201257**

AGPAT1 (NM_032741) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AGPAT1 (NM_032741) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AGPAT1
Synonyms:	1-AGPAT1; G15; LPAAT-alpha; LPAATA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201257 representing NM_032741 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGATTTGTGGCCAGGGGCATGGATGCTGCTGCTGCTGCTCTTCTGCTGCTGCTCTTCTGCTGCCCA
CCCTGTGGTTCTGCAGCCCCAGTGCCAAGTACTTCTTCAAGATGGCCTTCTACAATGGCTGGATCCTCTT
CCTGGCTGTGCTCGCCATCCCTGTGTGTGCCGTGCGAGGACGCAACGTCGAGAACATGAAGATCTTGCCT
CTAATGCTGCTCCACATCAAATACCTGTACGGGATCCGAGTGGAGGTGCGAGGGGCTCACCCTTCCCTC
CCTCGCAGCCCTATGTTGTTGTCTCCAACCACCAGAGCTCTCTCGATCTGCTTGGGATGATGGAGGTACT
GCCAGGCCGCTGTGTGCCATTGCCAAGCGCGAGCTACTGTGGGCTGGCTCTGCCGGGCTGGCCTGCTGG
CTGGCAGGAGTCATCTTCATCGACCCGGAAGCGCACGGGGGATGCCATCAGTGTCATGTCTGAGGTGCCCC
AGACCCTGCTCACCCAGGACGTGAGGGTCTGGGTGTTTCTGAGGGAACGAGAAACCACAATGGCTCCAT
GCTGCCCTTCAAACGTGGCGCCTTCCATCTTGCAGTGCAGGCCAGGTTCCCATTTGTCATGATGTCATG
TCCTCCTACCAAGACTTCTACTGCAAGAAGGAGCGTCGCTTACCTCGGGACAATGTGAGGTGCGGGTGC
TGCCCCCAGTGCCACGGAAGGGCTGACACCAGATGACGTCCAGCTCTGGCTGACAGAGTCCGGCACTC
CATGCTCACTGTTTTCCGGGAAATCTCCACTGATGGCCGGGTGGTGGTACTATCTGAAGAAGCCTGGG
GGCGGTGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG201257 representing NM_032741
 Red=Cloning site Green=Tags(s)

MDLWPGAWMLLLLLFLLLLFLLPTLWFCSPSAKYFFKMAFYNGWILFLAVLAIPVCAVRGRNVENMKILR
 LMLLHIKLYLIGIRVEVRGAHHFPPSQPYVVVSNHQSSDLLGMMEVLPGRVCVPIAKRELLWAGSAGLACW
 LAGVIFIDRKRTGDAISVMSEVAQTLLTQDVRVWVFPEGTRNHNGSMLPFKRGAFHLAVQAQVPIVPIVM
 SSYQDFYCKKERRFTSGQCQVRVLPVPTEGLTPDDVPALADRVRHSM LTVFREISTDGRGGGDYLLKPKG
 GGG

TRTRPLE - GFP Tag - V

Restriction Sites:

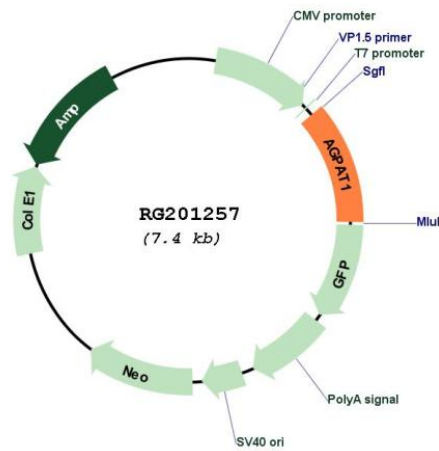
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_032741

ORF Size: 2041 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_032741.5](#)

RefSeq Size: 2023 bp

RefSeq ORF: 852 bp

Locus ID: 10554

UniProt ID: [Q99943](#)

Cytogenetics: 6p21.32

Domains: Acyltransferase

Protein Families: Transmembrane

Protein Pathways: Ether lipid metabolism, Glycerolipid metabolism, Glycerophospholipid metabolism, Metabolic pathways

Gene Summary: This gene encodes an enzyme that converts lysophosphatidic acid (LPA) into phosphatidic acid (PA). LPA and PA are two phospholipids involved in signal transduction and in lipid biosynthesis in cells. This enzyme localizes to the endoplasmic reticulum. This gene is located in the class III region of the human major histocompatibility complex. Alternative splicing results in two transcript variants encoding the same protein. [provided by RefSeq, Jul 2008]